DOCUMENT RESUME

ED 284 440 FL 016 832

AUTHOR Heggie, Lorie
TITLE The Range of Null Operators: Evidence from Clefting.
PUB DATE Dec 86
NOTE 28p.; Paper presented at the Annual Meeting of the Linguistic Society of America/American Association for Applied Linguistics (New York, NY, December 27-30, 1986).
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS French; Grammar; Language Universals; *Language Variation; *Linguistic Theory; Phrase Structure; *Sentence Structure; *Structural Analysis (Linguistics); *Structural Linguistics; Surface Structure; *Syntax; Verbs

ABSTRACT

Grammatical theories that rely exclusively on the categorical nature of constituents to determine their syntactic behavior encounter problems when dealing with cleft construction. The ungrammaticality of such constructions is indeed syntactic in nature and can be shown to derive from a general principle of universal grammar (UG), restricting the range of null operators that partake in cleft construction. Theoretical assumptions underlying the clefting phenomena are reviewed, followed by a demonstration of the plausibility of a descriptive generalization concerning cleftability stated in terms of Theta Theory (Chomsky, 1981). Several apparent counterexamples to that generalization are considered which are shown to fall out of other modules of the grammar developed within the Government Binding framework. The question of why such a generalization should hold is addressed through deeper insight into the characteristics of the null operator involved in the clefting construction. A constraint is formulated regarding the range of null operators. It is proposed that this Null Operator Generalization be extended to all base-generated empty categories, a hypothesis which is shown to rightly predict the distribution of predicate clitics in French. (CB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED284440

THE RANGE OF NULL OPERATORS: EVIDENCE FROM CLEFTING*

Lorie Heggie
University of Southern California

0. INTRODUCTION

Grammatical theories which rely exclusively on the categorial nature of constituents to determine their syntactic behavior encounter problems when dealing with the cleft construction. Emonds (1976) argues that only NPs and PPs can be clefted. As can easily be shown, however, this claim simply lacks empirical adequacy. Consider, for instance, the sentence in (1) where an AP fills the cleft position:

(1) It's [drunk] that John sounds intelligent [e].

Delahunty (1982), in trying to solve this problem, suggests a different approach to clefts by which the restrictions on cleft sentences observed are claimed to be derivable from the limitations on the generation of PS rules standardized in X'-syntax. Thus, whatever prevents PS rules from generating strings such as *VP ---> V VP S' and *VP ---> V S' S' is also assumed to rule out sentences like (2) and (3) respectively.

(2) *It's [eaten the cake] that John has [e].

(3) *It was [that Mary came home early] that John was happy [e].

Because PS rules can generate strings of the form VP ---> V AP S', cleft sentences like (1) are rightly predicted to be grammatical. As Delahunty

Paper presented at the Annual Meeting of the LSA/AAAL/ADS (New York, NY December 27-30, 1986).

FL016832

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L. Heggie

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

himself recognizes, however, such an approach does not extend to cases like those in (4), whose ungrammaticality he takes to be unrelated to syntax.[1]

(4) a. *It's [clever] that John sounds [e] drunk.
b. *It's [a great teacher] that Mary considers Suzan [e].
c. *It's [under the table] that they drank him [e].

In this paper I argue, contra Delahunty (1982), that the ungrammaticality of the sentences in (4) is indeed syntactic in nature and can be shown to follow from a general principle of UG restricting the range of null operators which I assume, following Jaeggli (1982), partake in the cleft construction.[2]

This paper is organized as follows. Section 1 lays out the theoretical assumptions underlying my discussion of clefting phenomena. In section 2, I demonstrate the plausibility of a descriptive generalization concerning cleftability stated in terms of Theta Theory (Chomsky, 1981). In section 3, I consider a number of apparent counterexamples to that generalization which are shown to fall out of other modules of the grammar developed within the Government Binding framework. I turn in section 4 to the question of why such a generalization should hold, seeking a deeper insight into the characteristics of the null operator involved in the clefting construction. This leads me to formulate a constraint on the range of null operators called the Null Operator Generalization (NOG). Finally in section 5, it is proposed that the NOG be extended to all base-generated empty categories, a hypothesis which is shown to rightly predict the distribution of predicate clitics in French.

1. THEORETICAL ASSUMPTIONS

Chomsky (1977) argues that clefting constructions involve the generation in the base of the cleft position. Because the "gap" present in the sentence which is predicated of the clefted phrase is illicit if it occurs in Island contexts, Chomsky assumes that it is the trace of syntactic Wh-movement, a movement known to be constrained by Subjacency. The operator moved, which Chomsky takes to be an overt Wh-operator ultimately deleted in PF, is argued in Jaeggli (1982) to be a null operator. In this paper, I will essentially assume Chomsky's (1977) structure for clefts as amended by Jaeggli (1982). Such a structure appears in (5) below.

(5) $[_S$ it $[_{VP}$ be $[_{S'}$ XP_i $[_{S'}$ OP_i $[_S$ ... $[e]_i$ ...]]]]]

In addition, it will be assumed, following Barss (1984), that (XP, OP, [e]) in (5) is an A'-chain, which ensures that the clefted element XP is assigned the Case and theta role received by the trace of the null operator. This assumption is consistent with the claim that null operators, as "weak operators", may paticipate in chain relations as intermediate members only if they are locally "identified" by a lexically realized antecedent (Jaeggli, 1982; Stowell, 1985). The exact formulation of identification for null operators appears in (6):

(6) <u>The Identification Principle</u> (Stowell, 1985)

A category A may identify another category B iff

(i) A is coindexed with B and

(ii) the reference (or range) of the chain containing A is lexically specified (internal to the chain)

Finally, the structure in which this A'-chain is embedded is taken to be an adjoined structure based on Predication (Williams, 1980), similar in that respect to the structure for small clauses argued for in Stowell (1984).

2. A THEMATIC CONSTRAINT ON CLEFTABILITY

Putting aside for the moment the clefting of adjectives of the type in (1) as well as that of clausal constituents (cf. 3), a descriptive generalization can be seen to emerge from the set of data presented below; namely, an element which has an external theta role to assign, be it primary or secondary,[3] cannot be clefted. The elements designated by this generalization as uncleftable include VP (cf. (7))[4] , AP (cf. (8))[5] , AdvP (cf. (9)), and predicates of small clauses (cf. (10)).

(7) a. *It's [$_{VP}$ blown up that ship] that the French should not have [e].

b. *It was [$_{VP}$ stealing my money] that she caught him [e].

(8) a. *It's [$_{AP}$ good] that John thinks that Mary is a [e] wife.

b. *It's [$_{AP}$ big] that you captured a [e] bear.

(9) a. *It's [$_{AdvP}$ frequently] that we skinny-dip at the quarry [e].

b. *It's [$_{AdvP}$ recently] that he came into a fortune [e].

(10) a. *It's [$_{PP}$ in the garden] that I believe the cat [e].

b. *It's [$_{AP}$ mellow] that Bill thinks Suzan [e].

c. *It's [$_{NP}$ a good shot] that I find him [e].

The generalization derived can thus be stated as follows:

(11) If an element A has an external theta role to assign, then A is not cleftable.

The constraint on cleftability described in (11) in effect restricts the class of cleftable elements to non-predicates. Sentences like (1) (repeated here for convenience), however, where an adjective understood as modifying a subject appears in the cleft position seem to be flagrant violations of (11).

(1) It's [drunk] that John sounds intelligent [e].

In order to understand what makes sentences like (1) possible, (11), which is stated in terms of what cannot be clefted, must be reformulated so as to state what are the necessary characteristics for an element to be cleftable. The generalization in (11) tells us that cleftable elements are not theta role assigners. The class of cleftable elements therefore includes any category which is a "complete functional complex" in the sense of Chomsky (1986a,b). A definition of "complete functional complex" appears in (12):

(12) A category X is a complete functional complex if all the grammatical functions compatible with its head are realized in it. (Adapted from Chomsky (1986b))

That the notion of complete functional complex makes the right predictions about cleftability can easily be shown. Consider, for example, the cleftability of prepositions. According to the definition in (12), a preposition with a nominal object is a complete functional complex but a preposition alone is not, unless it is intransitive. It is therefore predicted that transitive prepositions should not be cleftable (cf.(13)), but transitive prepositions with an object (cf.(14)) as well as intransitive prepositions (cf.(15)) should. These predictions are borne out as the following paradigm illustrates:

(13) a. *It's [out] that John walked [e].
b. *It's [down] that the baby carriage rolled [e].

(14) a. It's [out the door] that John walked [e].
b. It's [down the hill] that the baby carriage rolled [e].

(15) a. It was [afterwards] that he realized his blunder [e].
b. It was [beforehand] that Mary had placed the gun in the top drawer [e].

Consider now the unclefted version of (1) given in (16). Following Chomsky (1981) and Stowell (1981), I will assume that the outmost adjective is not a "bare" adjective but, rather, an adjectival adjunct small clause whose subject is PRO controlled by the matrix subject John:

(16) $John_i$ sounds intelligent [PRO_i drunk].

If so, then what is clefted in (1) is not a predicate but, rather, a small clause. It is therefore rightly predicted that such a small clause, being a complete functional complex, is a cleftable element. Interestingly, resultative APs, which have been argued in Williams (1980) and Fabb (1984) to be secondary theta role assigners with respect to the object NP offer a sharp contrast with circumstantial APs like drunk in (16) when clefted:

(17) a. *It's [raw] that James eats his meat [e].
b. *It's [flat] that Dwight hammered the nail [e].

The adjectives in (17), not being the head of a small clause with a PRO subject, are true predicates and as such remain unavailable for clefting.

Having thus established the validity of a generalization based on the notion of complete functional complex, I turn next to a number of uncleftable elements which such a generalization does not cover but whose uncleftability, I argue, follows from other modules of the grammar.

3. A MODULAR APPROACH TO CLEFTING

3.1. Requirements on NPs

Since NPs are not their role assigners, it is predicted by the present treatment that they should all be cleftable. Although this is indeed the case generally, there are two contexts in which NPs cannot be clefted. The first case involves sentences like the following:

(18) a. *It's Mary that it seems [e] to like John.
b. *It's David that it was believed [e] to have killed Mary.

The ungrammaticality of the examples in (18) can be straightforwardly derived from Case Theory. As is well known, the structural position where the "gaps" appear in (18) is a Caseless position. In order for an NP base-generated in that position to receive Case, it must undergo raising to the subject position. This is illustrated in (19):

(19) a. *It seems Mary to like John.
b. $Mary_i$ seems t_i to like John.

Going back to the ungrammaticality of (18), two possibilities must be considered. First, suppose that the cleft position is not a Case-position. If so, then the only way for a clefted NP to be licit is to inherit Case at S-structure through an A'-chain which originates in the position where the null operator is base-generated. As (19) shows, however, that position is

not Case-marked. It follows that the NP in the cleft position is Caseless and the sentence is ruled out as a violation of Case Theory. Next, suppose that the cleft position is a Case-position (i.e., that the copula is a Case-assigner). If so, the variable left by the null operator in the clause predicated of the clefted NP is still without Case. As argued in Chomsky (1981), however, variables, which have the syntactic status of R-expressions, must be Case-marked. Again ungrammaticality results from a violation of Case Theory.

The second class of uncleftable NPs is the class of expletive elements. Consider the following sentences:

(20) a. *It's [it] that I consider [e] unlikely that Jack will win.
b. *It's [it] that [e] seems that Jack will win.
c. *It's [there] that [e] is a unicorn in the garden.

All the examples in (20), however, constitute a clear violation of Stowell's (1985) Identification Principle (cf. (6)) which states that a chain contaning an identifier must be lexically specified. Since expletive elements have neither reference nor semantic content, the A'-chain containing the null operator is left unspecified. A direct consequence of this is that the null operator is not assigned a range, hence it remains uninterpretable.

3.2. Small Clause Complements

Recall that the grammaticality of sentences like (1) was attributed to the fact that what appears in the cleft position is a complete functional complex with a subject PRO:

(21) It's [PRO drunk] that John sounds intelligent [e].

If so, then we expect small clauses in general to be cleftable for the same reason. The clefting of small clauses, however, turns out to be always ungrammatical if the subject of the small clause is lexically realized. I would like to suggest that this state of affairs results from the requirements placed on NPs by Case Theory. Consider the following paradigm:

(22) a. John fears [Bill killed by terrorrists].
b. *It's [Bill killed by terrorrists]$_i$ that John fears [e]$_i$.

In (22a), the subject of the small clause (i.e., Bill) is Case-marked by the verb fears. Since PRO, an ungoverned element (Chomsky, 1981), can appear as the subject of a clefted small clause (cf. (21)), I will assume that in (22b), the copula does not govern, hence does not Case-mark the NP Bill. Since that NP cannot receive Case through the A'-chain - as it is the entire small clause, not just its subject, which gets coindexed with the null operator - it remains Caseless, thus triggering a Case Theory violation. As

expected, clefting the subject of the small clause alone is licit as the NP, being coindexed with the null operator inherits Case through the A'-chain:

(23) It's [Bill]$_i$ that John fears [e]$_i$ killed by terrorrists.

3.3. Predicates with no External Theta Role to Assign

Raising verbs like seem head predicates which do not assign an external theta role. Such predicates are therefore predicted to be cleftable. As (24) illustrates, however, this prediction runs contrary to fact:

(24) a. *It was [killed t_k by the enemy]$_i$ that John$_k$ was [e]$_i$.
b. *It's [(to) seem t_k to be ill]$_i$ that John$_k$ wants PRO$_k$ (to) [e]$_i$.

Sentences like those in (24), however, are ruled out by the Binding Theory. Each predicate which appears in the cleft position in (24) contains an NP-trace labelled t_k. Since NP-trace is an anaphoric empty category, it must obey Principle A which states that an anaphor must be bound (i.e., coindexed with and c-commanded by its antecedent) in its governing category. The NP-traces which appear in (24), however, are not c-commanded by their antecedent at any level of representation and therefore violate Principle A.

3.4. Clausal Constituents

S' constituents, not being theta role assigners, are also predicted by the generalization in (11) to be cleftable. As (3), along with the further

examples provided in (25) illustrate, however, clefting an S' constituent yields an ungrammatical result:

(25) a. *It's [John to be on time] that we expect [e].
b. *It's [PRO to give Sally a rose] that I persuaded John [e].
c. *It's [who saw John] that Mary wonders [e].
d. *It's [that Mary came in] that John heard [e].
e. *It's [that Mary was handicapped] that [e] was asserted.

I would like to suggest that the ungrammaticality of the sentences in (25) can be explained by examining these properties of S' which are relevant to the Identification Principle of Stowell (1985). Recall that this principle forces the antecedent of a null operator to be a lexical category. A category is assumed to be lexical if its head is defined in terms of the features [+/- N], [+/- V] (Chomsky, 1986b). Since the head of S' has been assumed to be Infl and/or Comp, it is non-lexical. It follows that S' also is non-lexical and therefore not a licit identifier for the empty operator. Since the null operator lacks an identifier it remains uninterpretable and the sentence is ungrammatical. Further evidence for this account comes from the fact that not all clausal constituents are uncleftable. Consider, for instance, the following:

(26) a. It's [that her education has been inadequate] that we took into consideration [e].

b. It was [that everyone had been invited to the party but her] that Mary resented [e].

c. It's [that her petunias still hadn't been planted] that [e] was regretted by Margaret.

d. It was [that a storm was coming and that the hikers were still out] that bothered everyone.

All factive sentences such as those in (26) are cleftable, a fact first noticed by Delahunty (1982). Interestingly, factives have been assumed in the literature to contain some kind of nominal head, be it an empty NP head (Kiparsky and Kiparsky, 1970), a [+N] feature assignment to Comp (Kayne, 1981), or an inherent [+N] feature (Adams, 1985). Assuming then that factive clauses are lexically headed by NP, we rightly predict that they should be licit identifiers of null operators in clefting structures.

As can be seen from the facts presented so far then, what determines cleftability is not categorial identity but, rather, the fact that cleftable elements need to be a complete functional complex along with the usual constraints derived from the various modules of the grammar assumed in the Government Binding framework. In the next section I shall examine the requirement that clefted elements be a complete functional complex in more detail, in an attempt to reach a deeper understanding of why this should be so.

4. THE NULL OPERATOR GENERALIZATION

Consider once again the structure of clefts in (5):

(5) $[_S$ it $[_{VP}$ be $[_{S'}$ XP_i $[_{S'}$ OP_i $[_S$ ... $[e]_i$ ...]]]]]

A null operator, generated in the base in the position of [e], raises to Comp at S-structure in order to be identified by the element in the cleft position (i.e., XP). Since this null operator must undergo syntactic Wh-movement and bind a variable at S-structure, one might expect that its behavior parallel that of overt Wh-operators in English. This expectation is not fulfilled, however, as the following paradigm illustrates:

(27) a. $[\text{How tall}]_i$ is John $[e]_i$
b. *It's $[\text{tall}]_i$ $[OP_i$ that [John is $[e]_i]]$

(28) a. $[\text{How much of an idiot}]_i$ does John consider Bill $[e]_i$
b. *It's $[\text{an idiot}]_i$ $[OP_i$ that [John considers Bill $[e]_i]]$

The clauses predicated of a clefted element in (27b) and (28b) are structural duplicates of (27a) and (28a). The fact that the former contain a non-overt, rather than an overt, operator, however, appears to induce a further constraint on what can be Wh-extracted. I would like to suggest that this constraint can be traced back to a theta property specific to null operators. Theta role assignment being a D-structure phenomenon, consider

the D-structure representations of (27) and (28) which appear in (29) and (30) respectively:

(29) a. John is [how tall]

b. It is [tall] [that [John is OP]]

(30) a. John considers [Bill [how much of an idiot]]

b. It is [an idiot] [that [John considers [Bill [OP]]

Observe that in the (b) sentences of (29) and (30), a null operator fills the position normally reserved for the predicate. This means that the null operator must fulfil the function of the predicate it stands for at that level; that is, assign a theta role to its subject. I would like to propose that the ungrammaticality of (27b) and (28b) is due to the fact that null operators are not theta role assigners. It follows that the subject of the predicate they stand for is not assigned a theta role thus violating the Theta Criterion. Later identification of the null operator by a lexical constituent at S-structure cannot ameliorate the situation as the identification process takes place at a level where theta assignment is no longer possible. Overt operators, on the other hand, do assign a theta role in the base as required. I conclude that although null operators may receive a theta role at D-structure which they carry through membership in a A'-chain to their lexical head at a subsequent level, D-structure assignment of theta roles by a null operator to elements external to the chain in which it is contained is not possible.

It now becomes clear why a clefted element must be a complete functional complex in order to be clefted. To any clefted element which has a theta role to assign will correspond in the clause predicated of it a null operator which must fulfil its function as a theta role assigner. Since, however, null operators can never assign theta roles, it follows that their distribution will be restricted to the class of elements which are not theta role assigners. This constraint on the range of null operators is stated in (31):

(31) Null Operator Generalization (NOG)
The range of a null operator is restricted to a complete functional complex.

Since the constraint in (31) applies to an empty element, namely, the null operator, at D-structure, it seems logical to ask whether the same constraint is valid for all empty elements generated in the base. In the next section we will provide evidence that it is indeed so at least for another base-generated empty category; namely, pro.

5. PREDICATE CLITICS IN FRENCH

Suppose that the NOG is due to the fact that only lexically realized elements can assign theta roles. If this is true, then it must be the case that all elements which are lexically empty at D-structure are subject to the same constraint, i.e., they can never substitute for a predicate. The NOG can then

be extended to cover such elements. The formulation of this extension appears in (32):

(32) Extension of the Null Operator Generalization (ENOG)
All empty categories at D-structure (e.g., PRO, pro, and OP) range over a complete functional complex.

That PRO may not substitute for a predicate follows from the fact that its distribution is restricted to subject positions by the theory of Control. It thus appears that PRO cannot convincingly bear on the validity of (32). An element like pro, on the other hand, provides the relevant evidence. In recent work, pro has been posited in clitic configurations as the filler of the "argument" position identified by a clitic (Montalbetti, 1982; Sportiche, 1983; among others). The question is, what happens if the clitic identifies a predicate instead of an argument? French provides just such a case.

In French, clitics may identify not only argument positions but also positions normally occupied by predicates. In the latter case, the clitic used is termed "predicate clitic" and can only have one form, namely, le. A sentence containing a predicate clitic appears in (33b).

(33) a. Ursule est pingre.
Ursule is stingy
Ursula is stingy.

b. Ursule l'$_i$ est pro$_i$
Ursule it-is
Ursula is it. (it = stingy)

Interestingly, predicate clitics do not behave in a fashion parallel to argument clitics. As illustrated in (34), argument clitics may appear in structures involving theta-marked small clauses (cf. (34b), but predicate clitics cannot (cf. (34c)), seemingly in contradiction with conventional assumptions about the behavior of clitics.

(34) a. Je trouve Ursule pingre.
I find Ursule stingy
I find Ursula stingy.
b. Je la$_i$ trouve pro$_i$ pingre.
I her-find stingy
I find her stingy.
c. *Je le$_i$ trouve Ursule pro$_i$
I it-find Ursule
I find Ursula it.

However, assuming that theta-role assignment is directional[6] (Koopman, 1983; Travis, 1984; Li, 1985), the ENOG provides an answer for these recalcitrant data. In (34a), the uncliticized version of (34b), pingre (stingy) assigns an external theta-role to its subject, Ursule. Even if this subject is cliticized, as in (34b), pingre is still be able to assign its theta-role to pro. However, if the small clause predicate is cliticized, the predicate position

is filled with pro, which cannot assign any theta-roles. Thus, the subject of the small clause is left without a theta role and the sentence is ungrammatical.

Further support for this approach to predicate cliticization is provided by the fact that extraction of an overt Wh-element, which may assign a theta role, is possible from the predicate position of sentences such as (34), as shown in (35), mirroring the facts presented for cleft sentences (cf. (27)-(28)).[7]

(35) Comment$_i$ trouves-tu Ursule [e]$_i$

how find-you Ursule

How do you find Ursula?

Thus, it appears that the behavior of predicate clitics in French may be readily explained by ENOG .

6. SUMMARY

In this paper it was shown that analyses of clefting phenomena which take the categorial nature of an element as a criterion for its cleftability are not only stipulative in nature but also leave a non-negligible range of data unaccounted for. Upon empirical investigation, it was observed that predicates cannot be clefted. It was hypothesized that this restriction stems from the fact that null operators, being lexically empty, cannot assign theta roles and thus cannot range over predicates as the latter are

theta role assigners (NOG). The logical extension of this constraint that all empty categories generated at D-structure (ENOG) was then shown to make the right predictions concerning predicate cliticization in French. It was thus established that independent constraints advocated by a modular approach to universal grammar such as the Government-Binding framework along with a characterication of the null elements found at D-structure in terms of Theta Theory (i.e., ENOG) provide a natural account of clefting phenomena.

*I am indebted to Joseph Aoun, Marc Authier, and Osvaldo Jaeggli for their comments and criticism on an earlier version of this paper. All errors are mine.

[1] Delahunty (1982) only brings up examples of the type in (4a) which he argues involve "an incompatibility of exhaustiveness and uniqueness implicatures." Although the sentences in (4b-c) are mine, they also are problematic for Delahunty's treatment and would presumably force him to invoke the semantic account given for (4a) to rule them out.

[2] In this paper I concentrate on clefts as a syntactic phenomenon only, attempting to discover the properties involved in syntactic focus as opposed to discourse or metalinguistic focus. Accordingly, I acknowledge but do not explore the following distinction:

(i) *It's green that her eyes are.

(ii) It's GREEN, not blue, that her eyes are.

(iii) A: I believe her eyes are blue.

B: No, it's GREEN that her eyes are.

A sentence like (i) uttered with "neutral intonation" is ungrammatical. However, if the same sentence involves any kind of metalinguistic or

contrastive focus as in (ii) and (iii), its grammaticality improves considerably (Declerck, 1984). Since contrastive focus need not affect syntactic constituents but can affect phonemes (Horn, 1985),I take these phenomena to be unrelated to the syntactic properties of clefts:

(iv) It's ill-U-minate, not el-I-minate, that I said.

3 Following Zubizaretta (1982), I assume that adverbs assign secondary theta roles.

4 Some VPs appear to be more cleftable than others as the following contrast illustrates:

(i) a. ??It's [drinking beer from the bottle] that she keeps doing.

b. ??It was [hiding some papers] that Mary noticed Sally doing.

(ii) a. *It's [eaten the cake] that John has (done).

b. *It's [ridden a camel] that Mary has (done).

In order to account for the intermediate status of (i) two factors must be taken into consideration. First it seems reasonable to assume that in both (i) and (ii) the dummy verb do has the usual verbal properties of assigning Case and a theta role. Assuming further that gerunds describing activities

have nominal properties (cf. ?I like Peter and skiing), an A'-Case chain is established in (i) but not in (ii) since the latter contains a clefted past participle. Still the sentences in (i) are quite odd. Perhaps their oddity can be attributed to the fact that a verb like do selects a very limited class of NPs (e.g., what, hair, dishes, etc.).

5 There is an apparent counterexample to the claim that adjectives which assign an external theta role cannot be clefted:

(i) It's [blue] that they painted the house [e].

The grammaticality of (i) cannot be due to the fact that we are dealing with a color adjective because as (ii) shows, color adjectives in general are not cleftable:

(ii) a. *It's [blue] that I saw a [e] house.

b. *It's [white] that I saw John turn [e].

The well formedness of (i) cannot be attributed to the fact that the sentence has a resultative interpretation either since resultative APs in general are no more cleftable than color adjectives.

(iii) a. *It's [tough] that Bill cooked the meat.

b. *It's [flat] that they hammered the nail.

Following Rothstein (1983), I will assume that resultatives are secondary predicates which assign a theta role to an NP. It follows that resultatives cannot be clefted. But then what makes the color adjective in (i) cleftable? I would like to suggest that blue in (i) is not a resultative predicate but, rather: an optional argument of the verb to paint which has no external theta role to assign. In support for this hypothesis, note first of all that a color is implied with a verb like to paint, while there is no similar implication of "toughness" with the verb to cook or of "flatness" with the verb to hammer. Second, if we Wh-extract the adjective in (i) and the adjectives in (iii), the Wh-operators involved differ in a relevant way: the color adjective in (i) corresponds to what, an argument operator, whereas the adjectives in (iii) only are Wh-extractable as how, an adjunct operator:

(iv) a. What/*how did they paint the house? (Red)

b. *What/how did they hammer the nail? (Flat)

It thus appears that color adjectives optionally found in "resultative" constructions like (i) are not theta role assigners but receive a theta role and Case from the verb. In a sentence like (i) then, blue behaves like a regular nominal; i.e., as if it were an abbreviation for the color blue. As such it as cleftable as other NPs.

6 I assume that external theta-role assignment must be from right to left in French, just as in English.

7 Croire is a notable exception to the data under discussion as it does not allow wh-extraction from the predicate position.

(i) *Qu'est-ce que$_i$ tu crois Jean [e]$_i$

The properties of croire are poorly understood because of its highly idiosyncratic nature (Ruwet, 1982), and I will not attempt a solution in this paper.

REFERENCES

Adams, M.: 1985, 'Government of Empty Subject in Factive Clausal Complements', Linguistic Inquiry 16, 305-312.

Barss, A.: 1984, 'Chain Binding', ms., MIT, Cambridge, Massachussets.

Chomsky, N.: 1977, 'On Wh-Movement', in Culicover et al, eds., Formal Syntax, 71-132.

_____: 1981, Lectures on Government and Binding, Foris, Dordrecht.

_____: 1986a, Barriers, MIT Press, Cambridge, Massachussets.

_____: 1986b, Knowledge of Language: Its Nature, Origin, and Use, Praeger, New York.

Declerck, R.: 1984, 'Some Restrictions on Clefts that Highlight Predicate Nominals', Journal of Linguistics 20, 131-154.

Delahunty, G.: 1982, Topics in the Syntax and Semantics of English Cleft Sentences, distributed by the Indiana University Linguistics Club, Bloomington, Indiana, 47405.

Emonds, J.: 1976, A Transformational Approach to Syntax, Academic Press.

Fabb, N.: 1984, Syntactic Affixation, unpublished doctoral dissertation, MIT.

Horn, L.: 1985, 'Metalinguistic Negation and Pragmatic Ambiguity', Language 61, 121-174.

Jaeggli, O.: 1982, Topics in Romance Syntax, Foris, Dordrecht.

Kayne, R.: 1981, 'ECP Extensions', Linguistic Inquiry 12, 93-133.

Kiparsky, C. and P. Kiparsky: 1970, 'Fact', in Progress in Linguistics, M. Bierwisch & K. Heidolph eds., The Hague: Mouton.

Koopman, H.: 1983, The Syntax of Verbs. From Verb Movement Rules in the Kru Languages to Universal Grammar, doctoral dissertation, MIT.

Li, A.: 1985, Abstract Case in Chinese, unpublished doctoral dissertation, University of Southern California, Los Angeles, California.

Montalbetti, M.: 1982, 'Clitics and Empty Categories', Proceedings of WCCFL I

Rothstein, S.: 1983, The Syntactic Forms of Predication, unpublished doctoral dissertation, MIT.

Ruwet, N.: 1982, Grammaire des Insultes et Autres Etudes, Editions du Seuil, Paris.

Sportiche, D.: 1983, Structural Invariance and Symmetry in Syntax, unpublished doctoral dissertation, MIT.

Stowell, T.: 1981, Origins of Phrase Structure, unpublished doctoral dissertation, MIT.

_____: 1984, 'Subjects Across Categories', The Linguistic Review 2, 272-285.

_____: 1985, 'Null Operators and their Antecedents', Proceedings of NELS XVI.

Travis, L.: 1984, Parameters and Effects of Word Order Variation, unpublished doctoral dissertation, MIT.

Williams, E.: 1980, 'Predication', Linguistic Inquiry 11, 203-238.

Zubizaretta, M.-L.: 1982, On the Relation of the Lexicon to Syntax, unpublished doctoral dissertation, MIT.